

CLAIMS

1. A silver-based powder characterized by being surface-treated with an oxidation inhibitor by means of a mechanochemical reaction.
2. The powder of claim 1, where the oxidation inhibitor is a phenol-based compound, hindered phenol-based compound, or triazole-based compound.
3. A method of preparation of a the silver-based powder of claim 1, where the method comprises the steps of:
 - a) utilizing an organic solution of the oxidation inhibitor as a lubricating agent,
 - b) applying mechanical energy to the silver-based powder, and
 - 10 c) subjecting the silver-based powder to surface treatment with said oxidation inhibitor.
4. The method of claim 3, where the oxidation inhibitor is a phenol-based compound, hindered phenol-based compound, or triazole-based compound.
5. A composition comprising a curable silicone composition and a silver-based powder surface-treated with an oxidation inhibitor.
- 15 6. The curable silicone composition of claim 5, where the silver-based powder is surface-treated with the oxidation inhibitor by means of a mechanochemical reaction.
7. The curable silicone composition of claim 5, where the oxidation inhibitor is a phenol-based compound, hindered phenol-based compound, or triazole-based compound.
8. The curable silicone composition of claim 5, where the curable silicone composition
20 is curable with a hydrosilylation reaction.
9. The curable silicone composition of claim 8, comprising:
 - (A) 100 parts by weight of an organopolysiloxane having at least two alkenyl groups per molecule;
 - (B) an organopolysiloxane having at least two silicon-bonded hydrogen atoms per
25 molecule, where component (B) is present in an amount sufficient to provide silicon-bonded hydrogen atoms in an amount of 0.5 to 5 per one alkenyl group of component (A);
 - (C) 50 to 2,000 parts by weight of the silver-based powder surface-treated with an oxidation inhibitor; and
 - (D) a platinum catalyst in an amount required for promoting the hydrosilylation reaction.

10. Use of the curable silicone composition of claim 5, 6, 7, 8, or 9 as an electroconductive adhesive agents, heat-radiating adhesive agents, electroconductive die-bonding agents, heat-radiating die-bonding agents, electroconductive pastes, heat-radiating pastes, electromagnetic shielding agents, or raw materials for manufacturing
5 electroconductive sheets, heat-radiating sheets, or electromagnetic-wave absorption sheets.